

IN THE SPECIFICATION

Please amend the paragraphs of the specification as follows:

Please replace paragraph [1029] with the following amended paragraph:

[1029] Another method of combining uncorrelated antenna signals is called Optimal Combining (OC) or “Wiener-Hopf.” In OC, weighting factors are determined to maximize the quality of the signal, or the ~~signal-to-interference~~ signal-to-interference ratio, produced by combining the signals received by the two antennas. See Smart Antennas for Wireless Communications: IS-95 and Third Generation CDMA Applications, by Joseph C. Liberti, Jr. and Theodore S. Rappaport. Selection of weighting factors has a significant impact on the ability to reject interference.

Please replace paragraph number [1045] with the following amended paragraph:

[1045] The technique described above works with antennas that are spaced very close to each other and thus are highly correlated. The high correlation of the signals is accounted for in estimating the complex covariance matrix R. Thus, even though there is only a small difference between the two signals, weights may be selected to exploit this small difference. For example the weights selected as above will have the form:

$$w_1 = 1+z, w_2 = -1+z \text{ OR } w_1 = 1-z, w_2 = -1-z$$

where z is a small, non-zero, complex number. The value of z is based, in part, on the amount of correlation between the two antennas. For example, two highly correlated antennas could result in a smaller value for z, while two less highly correlated ~~antenna~~ antennas would result in a larger value for z.

Please replace paragraph number [1062] with the following amended paragraph:

[1062] The steps of a method or algorithm described in connection with the embodiments disclosed herein may be embodied directly in hardware, in a software module executed by a processor, or in a combination of the two. A software module may reside in RAM memory, flash memory, ROM memory, EPROM memory, EEPROM memory, registers, hard disk, a removable

disk, a CD-ROM, or any other form of storage medium known in the art. An exemplary storage medium is coupled to the processor such that the processor can read information from, and write information to, the storage medium. In the alternative, the storage medium may be integral to the processor. The processor and the storage medium may reside in an ASIC. The ASIC may reside in a user terminal. In the alternative, the processor and the storage medium may reside as discrete components in a user terminal.